## **STATEMENT OF BASIS (AI No. 2041)**

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0090247 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Poly Processing Company, LLC

P.O. Box 4150

Monroe, LA 71211-4150

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)

Office of Environmental Services

Post Office Box 4313

Baton Rouge, Louisiana 70821-4313

PREPARED BY: Ronda Burtch

**DATE PREPARED:** April 23, 2010

#### 1. PERMIT STATUS

A. Reason for Permit Action:

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term

B. NPDES permit – NPDES permit effective date: N/A

NPDES permit expiration date: N/A

EPA has not retained enforcement authority.

C. LPDES permit - LA0090247

LPDES permit effective date: September 1, 2005 LPDES permit expiration date: August 31, 2010

D. Date Application Received: February 17, 2010

## 2. FACILITY INFORMATION

## A. FACILITY TYPE/ACTIVITY - storage tank manufacturer

The Poly Processing facility manufactures storage tanks from high density cross linked and high density linear polyethylene resins. The solid resins are unloaded from rail cars at the west end of the site and stored in three silos until used in production. The polyethylene resins do not contain any hazardous components, they are insoluble in water, and are very stable. The greatest risk associated with the resin is the potential toxic fumes generated upon burning. Once the product is finished and cleaned, exposure to stormwater does not have the potential to release any pollutant into the stormwater runoff.

A sandblast area located to the west of the large mold storage area and south of Plant 1 is used to clean molds of resin build-up. The sandblast site is partially covered and sand can become exposed to stormwater. However, regular clean-up of the area prevents sand exposure to

> stormwater runoff. Used sand is removed from the sandblast pad and stockpiled. Stormwater runoff from the used sand flows west into the pond.

> Some tanks receive a spray foam insulation service. This is conducted on the east side of Plant 1 both under a protective awning and in an open area. Insulation material is stored in 55-gallon drums under protective cover.

> The site contains a large metal building (Plant 1) housing the ovens and storage tank production equipment, several diesel operated forklifts and tractors, metal building used for miscellaneous storage, an office building, product storage silos and an adjacent railroad spur, gravel and cement drives and parking areas, and gravel, cement and grass product and mold storage areas. There are surface and underground drainage conveyance systems and an onsite wastewater treatment station. Three separate discharges are monitored at the site, two for sanitary discharges and one for stormwater.

> This facility is subject to the Plastics Molding and Forming Point Source Category Effluent Limitations Guidelines (ELG), Subpart B - Cleaning Water Subcategory, 40 CFR 463.22.

#### B. **FEE RATE**

1. Fee Rating Facility Type: minor

2. Complexity Type: II 3. Wastewater Type: II

4. SIC code: 3089

C. LOCATION - 2201 Old Sterlington Road in Monroe, Ouachita Parish Latitude 32° 32' 45", Longitude 92° 04' 20"

#### 3. **OUTFALL INFORMATION**

#### Outfall 001

Discharge Type: process wash wastewater, hydrostatic test wastewater, and stormwater runoff

Treatment: none

Location: at the point of discharge from the the north side of the facility, prior to mixing with other

Flow: 3,000 GPD (non-stormwater)

Discharge Route: unnamed ditch, thence into Chauvin Bayou, thence into the Ouachita River

## Outfall 002

Discharge Type: treated sanitary wastewater from the plant and office buildings

Treatment: sewage treatment plant with aeration and chlorination

Location: at the point of discharge from the sewage treatment plant, on the north side of the facility,

prior to mixing with other waters

Flow: 1,400 GPD

Discharge Route: unnamed ditch, thence into Chauvin Bayou, thence into the Ouachita River

## Outfall 003

Discharge Type: treated sanitary wastewater from the training classroom

Treatment: sewage treatment plant with aeration and chlorination

Location: at the point of discharge from the sewage treatment plant, on the east side of the facility, prior

to mixing with other waters

Flow: 100 GPD

Discharge Route: unnamed ditch, thence into Bayou DeSiard, thence into the Ouachita River

## 4. RECEIVING WATERS

STREAM - unnamed ditch, thence into Chauvin Bayou, thence into the Ouachita River (Outfalls 001 and 002)

BASIN AND SEGMENT - Ouachita Basin, Segment 080102

DESIGNATED USES - a. primary contact recreation

b. secondary contact recreation

c. propagation of fish and wildlife

STREAM - unnamed ditch, thence into Bayou DeSiard, thence into the Ouachita River (Outfall 003)

BASIN AND SEGMENT - Ouachita Basin, Segment 080701

DESIGNATED USES - a. primary contact recreation

b. secondary contact recreation

c. propagation of fish and wildlife

d. drinking water supply

## 5. TMDL STATUS

Subsegment 080102, Bayou Chauvin-From headwaters to Ouachita River, is not listed on LDEQ's Final 2006 303(d) List as impaired, and to date no TMDLs have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

Subsegment 080701, Bayou DeSiard and Lake Bartholomew; also called Dead Bayou, is listed on LDEQ's Final 2006 303(d) list as impaired for mercury. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a future TMDL. Until completion of TMDLs for the Ouachita River Basin, those suspected causes for impairment which are not directly attributed to the storage tank manufacturing point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

## Mercury

The Mercury impairment listed for subsegment 080701 applies only to those waterbodies specifically identified in LDEQ's Final 2006 Integrated Report, and not to the entire subsegment unless so specified. Because the discharge from this facility is not directly into Bayou DeSiard, Mercury will not be addressed in permit development

Subsegment 080701 was previously listed as impaired for organic enrichment/low DO – nutrients, nitrate + nitrite as N, and phosphorus on past 303(d) lists, for which the below TMDLs have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDLs have been established for subsegment 080701:

# <u>Bayou DeSiard (including Lake Bartholemew) Watershed TMDL for Biochemical Oxygen-Demanding Substances and Nutrients</u>

Per the TMDL, "Lake Bartholemew and Bayou DeSiard do not accept any large point source discharges. The many homes and lawns along the waterbodies provide nonpoint source loading, primarily due to stormwater runoff and the use of pesticides, herbicides and fertilizers. A sod (grass) farm on Lake Bartholemew and a golf course in Frenchmen's Bend Subdivision also provide nonpoint source loading. The urban areas in Monroe also provide nonpoint loading due to runoff from city pavement and streets."

The implementation of this TMDL through wastewater discharge permits and implementation of best management practices to control and reduce runoff of soil and oxygen-demanding pollutants from nonpoint sources in the watershed will also control and reduce the nutrient loading from those sources.

LDEQ's position regarding water quality criteria for nutrients is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. See In The Matter of Sierra Club and Louisiana Environmental Network Request for Nutrient Limits. Docket No. AHD-DR-96001. LDEQ April 29, 1996. LAC 33:IX.2707.D.1.f.iii allows the establishment of effluent limitations based on an indicator parameter for the pollutant of concern. LDEQ's consistent approach to controlling nutrients where the WQMP does not otherwise require specific nutrient limitations is achieved by limiting the discharge of oxygen-demanding substances through BOD<sub>5</sub> limitations. Compliance with the BOD<sub>5</sub> limitations as an indicator parameter will result in the control of nutrients from the discharge sufficient to attain and maintain the applicable water quality standard. Effluent monitoring of the indicator parameter as conducted by the permittee in accordance with the permit in addition to LDEQs ambient water quality monitoring program will allow for further evaluation by the Department to determine the effectiveness of the limitation. The reopener clause located in Other Conditions of the permit allows the Department to modify or revoke and reissue the permit if the limitations as set on the indicator parameter are shown to no longer attain and maintain applicable water quality standards.

Since only load reductions from non-point sources were required by the TMDL, this facility will remain as previously permitted.

## 6. CHANGES FROM PREVIOUS PERMIT

- 1. Monthly average concentration limits for BOD<sub>5</sub>, TSS, and Fecal Coliform have been added to Outfalls 002 and 003.
- 2. Weekly Average limitations for Flow, BOD, TSS, and Fecal Coliform have been changed to Daily Maximum limitations for Outfalls 002 and 003.

## 7. COMPLIANCE HISTORY/COMMENTS

- A. <u>Inspections</u>: The last inspection performed at this facility was on March 30, 2009. The inspection revealed that the records were complete and the discharges are sampled in accordance with the permit. Some permit excursions were noted for 2006 2008. (See EDMS document number 42066313)
- B. <u>Enforcement Actions (COs, NOVs, Warning Letters, etc.)</u>: There are no open Enforcement actions against this facility. The last enforcement action was issued to this facility on May 14, 1994.

## C. DMRs:

Outfall 001 - A review of the discharge monitoring reports (DMRs) for the period of October 1, 2007 through September 30, 2009, revealed the following violation:

Date	Parameter	Reported Value	Permit Limits
October - December 2008	TSS, Monthly Avg	102 mg/l	45 mg/l

Outfalls 002 and 003 – A review of the discharge monitoring reports (DMRs) for the period of July 1, 2006 through June 30, 2009, revealed the following violations:

Date	Parameter	Outfall	Reported Value	Permit Limits
October-December 2006	, , ,	002	1,200 col/100 ml	400 col/100 ml
	Fecal Coliform, Monthly Avg	003	3,800 col/100 ml	400 col/100 ml
April-June 2007	BOD <sub>5</sub> , Monthly Avg	002	46 mg/l	45 mg/l
October-December 2007	TSS, Monthly Avg	002	52 mg/l	45 mg/l
	No DMR on File	003		

- Please note that the facility has been incorrectly reporting the monitoring periods for Outfalls 002 and 003. The facility has been submitting semiannual DMRs with quarterly monitoring periods.
- D. <u>Company Compliance History</u>: There are no other facilities owned by this company.

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of permit compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.

## 8. EXISTING EFFLUENT LIMITS

Outfall 001 – intermittent discharge of process wash wastewater, hydrostatic test wastewater, and stormwater runoff (estimated flow is 3,000 GPD, non-stormwater)

Pollutant		Monitoring			
	Monthly Avg	Daily Max	Monthly Avg	Daily Max	Frequency
	lbs/e	day	m	g/l	]
Flow (MGD)	Report	Report			1/quarter
BOD <sub>5</sub>		***	22	49	1/quarter
TSS			36	45	1/quarter
Oil & Grease				15	1/quarter
Soaps and/or Detergents	Report				1/quarter
pH (s.u.)	<u> </u>		6.0 (min)	9.0 (max)	1/quarter

Outfalls 002 and 003 - treated sanitary wastewater (estimated flow is 2,500 GPD and 100 GPD)

Pollutant		Monitoring			
	Monthly Avg	Weekly Avg	Monthly Avg	Weekly Avg	Frequency
	lbs/day		mg/l∙		1
Flow (MGD)	Report	Report	•		1/6 months
BOD <sub>5</sub>				45	1/6 months
TSS			***	45	1/6 months
Fecal Coliform (col/100 ml)		•		400	1/6 months
pH (s.u.)			6.0 (min)	9.0 (max)	1/6 months

## 9. ENDANGERED SPECIES

The receiving waterbodies, Subsegments 080102 and 080701 of the Ouachita Basin are not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated January 5, 2010 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The

effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

## 10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

## 11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

#### 12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

## Rationale for Poly Processing Company, LLC

1. Outfall 001 – process wash wastewater, hydrostatic test wastewater, and stormwater runoff (estimated flow is intermittent because of stormwater; 3,000 GPD, non-stormwater)

Pollutant	Limitation				Reference	
	Monthly Avg	Daily Max	Monthly Avg	Daily Max		
	lbs/	day	mg/l		1	
Flow (MGD)	Report	Report			LAC 33.1X.2701.1.1.b	
BOD <sub>5</sub>			22	49	40 CFR 463.22	
TSS			36	45	40 CFR 463.22	
Oil & Grease				15	Previous permit	
Soaps and/or Detergents	Report				Previous permit	
pH (s.u.)			6.0 (min)	9.0 (max)	40 CFR 463.22; Previous permit	

Treatment: none

Monitoring Frequency: quarterly for all parameters

Limits Justification: This facility is subject to 40 CFR 463.22, Subpart B, Plastics Molding and Forming Point Source Category, Cleaning Water Subcategory, Best Practicable Control Technology (BPT), and the previous permit.

2. Outfalls 002 and 003 - treated sanitary wastewater (estimated flow is 1,400 GPD and 100 GPD)

Pollutant	Limitation				Reference
·	Monthly Avg	Daily Max	Monthly Avg	Daily Max	
	lbs/	day	mg/l		,
Flow (MGD)	Report	Report			Previous permit; *; LAG530000
BOD <sub>5</sub>			30	45	Previous permit; *; LAG530000
TSS			30	45	Previous permit; *; LAG530000
Fecal Coliform (col/100 ml)		***	200	400	Previous permit; *; LAG530000
pH (s.u.)	***		6.0 (min)	9.0 (max)	Previous permit; *; LAG530000

Treatment: sewage treatment plant with aeration and chlorination

Monitoring Frequency: Semiannually for all parameters

Limits Justification: Limits and monitoring frequencies are based on current guidance for similar discharges from other industrial facilities\*, the Class I Sanitary Discharge General Permit, LAG530000 effective December 1, 2007, and the previous permit.

BPJ Best Professional Judgement

s.u. Standard Units

## **NOTE**

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

# STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 3089 are considered to have storm water discharges associated with industrial activity.

For first time permit issuance, the SWP3 shall be prepared, implemented, and maintained within six (6) months of the effective date of the final permit. For renewal permit issuance, the SWP3 shall be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).